



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,918	10/02/2003	Binz DeWalch		9571

7590
BINZ DEWALCH
3839 CHEVY CHASE
HOUSTON, TX 77019

12/02/2008

EXAMINER

HANDY, DWAYNE K

ART UNIT	PAPER NUMBER
----------	--------------

1797

MAIL DATE	DELIVERY MODE
-----------	---------------

12/02/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/677,918	Applicant(s) DEWALCH, BINZ	
	Examiner DWAYNE K. HANDY	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 and 24-157 is/are pending in the application.
- 4a) Of the above claim(s) 35-127 and 143-157 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21, 24-34 and 128-142 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-21 and 24-157 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 4-23, 25-34, 128-135 and 140-142 are rejected under 35 U.S.C. 102(b) as being anticipated by Stylli et al. (5,985,214). This rejection was applied in the previous Office Action (mailed 2/20/08). It remains in effect. Please see Response to Arguments below.

3. Claims 1, 2, 4, 10-20, 30-34 and 128-133 are rejected under 35 U.S.C. 102(b) as being anticipated by Ganz et al. (6,148,878). This rejection was applied in the previous Office Action (mailed 2/20/08). It remains in effect. Please see Response to Arguments below.

4. Claims 1, 2, 4-23, 25-34, 128-135 and 140-142 are rejected under 35 U.S.C. 102(b) as being anticipated by Marquiss et al. (6,902,703). This rejection was

Art Unit: 1797

applied in the previous Office Action (mailed 2/20/08). It remains in effect. Please see Response to Arguments below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 3 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stylli et al. (5,985,214) or Marquiss et al. (6,902,703) in view of Flavin et al. (6,175,816). Stylli or Marquiss teaches every element of claims 3 and 24 except for the shaker element. Flavin teaches an automated workstation for combinatorial chemistry. The workstation includes an orbital shaker for mixing the contents of the wells (column 2, lines 47-49). It would have been obvious to one of ordinary skill in the art to combine the shaker from Flavin with the system of Stylli or Marquiss. Stylli and Marquiss teach systems for automated devices for reacting or analyzing materials in microplates but do

Art Unit: 1797

not teach a device for mixing the materials in the wells. One would add the orbital shaker from Flavin to provide a mixing device in the workstation of Stylli or Marquiss.

Response to Arguments

6. The Examiner has removed the previous 112 rejections in response to Applicant's amending of the claims.
7. The Examiner notes that Applicant has not provided Arguments against the cited references. Applicant has asked for clarification of the rejections however. The Examiner has attempted to provide clarification below.

Stylli

Stylli teaches an automated system for handling samples in microplates. The overall system is shown in Figures 1 and 5 and described starting in column 6. With respect to the claims 1, 2, 12, 17-21, 30-34, 128, 131-140 and 142, the Examiner considers all of the system modules shown/described to be "processing stations" or "means for processing". This includes the storage and retrieval modules, sample distribution module, reaction module, and data processing and integration modules. The sample transporter is the "sample guide" or "means for moving". Stylli discloses a conveyor system ("actuator" or "means for contacting") as part of the sample transporter for moving the containers starting in column 19.

Regarding dependent claims 4-10, 28, 29

Stylli teaches the dispensing module starting in column 12 and continues through column 17. The dispensing module may include dispensing elements having protrusions (Figures 19A and 19B). The Examiner considers the dispensing elements as meeting the limitations of claims drawn to a set of injectors as well claims drawn to a plurality of dispense ports connected to a reservoir.

Re: Claims 11, 13, 15, 16, 129 and 130

Stylli teaches a lid removal and replacement station in column 17, lines 20-36. The Examiner considers this to be a plate sealer.

Re: Claim 14, 33

The Examiner considers the use of reference points and detector at each station to stop and align the plate (column 14, lines 1-45) as meeting the limitation of a "stop".

Re: Claims 9, 25-27

In addition to the dispensing function mentioned above, the dispensing elements may also comprise piercers since the dispenser tips may be elongate members that extend beyond the surface of the dispenser and into the well to allow aspiration. This would allow for piercing a flexible well seal over the well.

Ganz

Ganz teaches an automated device for filling and storing microplates. The overall system is shown in Figures 3-5 and 10-39 and described in starting at the bottom of column 2. With respect to the claims 1, 2, 12, 17-20, 30-34, 128 and 131-133, the Examiner again considers all of the system elements shown/described to be

Art Unit: 1797

“processing stations” or “means for processing”. This includes the input and output chambers (15, 16), filling assembly (6)/dispensing element (13), and lid lifter (41). The walking beam indexer (7) is the “sample guide” or “means for moving” with an “actuator” or “means for contacting” that moves the containers.

Regarding dependent claims 4 and 10

Ganz discloses a microplate filling assembly (6) in column 2, line 64.

Re: Claims 11, 13, 15, 16

Ganz teaches a lid removal and replacement station in column 4, lines 1-22. The Examiner considers this to be a plate sealer.

Re: Claim 14

The Examiner considers the use of sensing elements at each station to stop and align the plate (column 6, lines 25-38) as meeting the limitation of a “stop”.

Marquiss

Marquiss teaches an automated system for handling samples in microplates. The overall system is shown in Figures 18, 24-33, 40-43 and 48. With respect to the claims 1, 2, 12, 17-21, 30-34, 128, 131-140 and 142, the Examiner considers all of the system modules shown/described to be “processing stations” or “means for processing”. This includes the dispensing module, sample containment (sealing) module, and storage module. The transport module (described in columns 11-16) is the “sample guide” or “means for moving” having an “actuator” or “means for contacting”. The transport module includes a tray motor belt and guide shaft for guiding the sample plate.

Regarding dependent claims 4-10, 28, 29 -

Marquiss teaches the dispensing module starting in column 18 and continues through column 32. The dispensing module may include a wide variety of different dispensing elements having protrusions (see Figures 25-30). The Examiner considers the dispensing elements as meeting the limitations of claims drawn to a set of injectors as well claims drawn to a plurality of dispense ports connected to a reservoir.

Re: Claims 11, 13, 15, 16, 129 and 130 -

Marquiss teaches a sample containment module in columns 32-33 and Figures 40-43. The sample containment module places a sealing sheet over the sample wells.

Re: Claim 14, 33 -

The Examiner considers the use of plate sensors at each station to detect and align the plate (column 11, lines 32-42) as meeting the limitation of a "stop".

Re: Claims 9, 25-27 -

In addition to the dispensing function mentioned above, the dispensing elements may also comprise piercers since the dispenser tips may be elongate members that extend beyond the surface of the dispenser and into the well to allow aspiration. This would allow for piercing a flexible well seal over the well.

8. Applicant has also noted that claim 3 was not previously rejected by the Examiner. This was an oversight by the Examiner. A new rejection has been provided to address claims 3 and 24 and this Office Action has not been made Final since a new rejection has been provided.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DWAYNE K. HANDY whose telephone number is (571)272-1259. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dwayne K Handy/
Examiner, Art Unit 1797
November 23, 2008

/Jill Warden/
Supervisory Patent Examiner, Art Unit 1797